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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/945,050	08/31/2001	Mats Frannhagen	05043.P025	3050

7590

07/18/2003

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EXAMINER

LEVIN, NAUM B

ART UNIT

PAPER NUMBER

2825

DATE MAILED: 07/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/945,050

Applicant(s)

FRANNHAGEN, MATS

Examiner

Naum B Levin

Art Unit

2825

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-56 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-56 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 May 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

### DETAILED ACTION

1. This office action is in response to application 09/945,050 and amendment filed on 05/16/2003. Claims 1-56 remain pending in the application.

2. Applicant has added a new claim 56.

Based on the Applicant's amendment Examiner has performed additional search, and found a new reference.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

4. Claims 1-56 are rejected under 35 U.S.C. 102(e) as being anticipated by Bredin (US Patent 6,516,369).

Bredin discloses fair and high-speed arbitration system based on rotative and weighted priority monitoring including:

(1), (14), (19), (21), (22), (34), (36), (37), (47), (52), (54), (55) A method, apparatus and machine readable medium comprising (col.2, ll.51-62; col.6, ll.50-67; col.7, ll.1-3 and col.8, ll.5-20): a) rolling a vector of request values/rotative request vector, said request values/signals provided by a plurality of request agents/devices,

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wherein said rolling of said vector results in a rolled vector that reflects a round robin grant eligibility hierarchy/higher to lower priority/lower to higher priority and wherein a position within said rolled vector is reserved for a request value that was provided by a request agent that is to be recognized as being eligible for a grant (col.1, ll.66-67 and col.2, ll.1-16); and b) extracting/positing a first active request value that is observed in said rolled vector, starting from said position and extending in a direction toward a request value that is to be recognized as a request from a next request agent to be recognized as being grant eligible within said eligibility hierarchy (col.3, ll.11-54);

(2), (15), (23), (38), (48) The method, apparatus and machine readable medium wherein said position is the least significant position (col. 3, ll.59-67 and col.4, ll.1-7);

(3), (16), (24), (49) The method, apparatus and machine readable medium further comprising scanning said rolled vector for said first active request value, said scanning starting at said position (col.3, ll.59-67 and col.4, ll.1-7);

(4), (20), (35), (53) The method, apparatus and machine readable medium further comprising issuing a grant to that request agent of said request agents whose request corresponds to said active request value (col.3, ll.59-67 and col.4, ll.1-7);

(5), (17), (25), (39), (50) The method, apparatus and machine readable medium wherein said position is the most significant position (col.3, ll.36-39);

(6), (18), (26), (51) The method, apparatus and machine readable medium further comprising scanning said rolled vector for an active request value, said scanning starting at said position (col.1, ll.27-35);

(7), (27) The method and apparatus further comprising issuing a grant to that request agent of said request agents whose request corresponds to said active request value (col.3, ll.11-54);

(8), (28), (40), (43) The method and apparatus wherein said grant is a grant for bandwidth resources (col.2, ll.51-62; col.3, ll.59-67 and col.4, ll.1-7);

(9), (29), (44) The method and apparatus wherein said grant is a grant for routing resources (col.2, ll.51-62 and col.6, ll.11-21);

(10), (30), (45) The method and apparatus wherein said grant is a grant for switching resources (col.2, ll.51-62 and col.4, ll.11-15);

(11), (31), (46) The method and apparatus wherein said grant is a grant for processing resources (col.2, ll.63-67 and col.3, ll.1-10);

(12), (32), (41) The method and apparatus wherein said extracted first active request value is first provided in an output vector arranged as said rolled vector is arranged (col.3, ll.11-54);

(13), (33), (42) The method and apparatus further comprising un-rolling said output vector so as to produce a second output vector arranged as said vector of request values is arranged (col.3, ll.11-54 and ll.59-67 and col.4, ll.1-7);

(56) An apparatus/computer system comprising:

a round robin control having an input to receive request from a plurality of request agents, said round robin control unit having an output to identify which particular one of said request agents is to be considered as being provided a grant, said round robin control unit comprising a plurality of grant units, each grant generation unit input

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coupled to said input, each grant generation output coupled to said output, the number of said grant generation units being equal to the number of said request agents, each grant generation unit capable of identifying each particular one of a said request agents is to be considered as being provided a grant, each grant generation unit comprising its own uniquely arranged vector of said requests (col.1, ll.66-67; col.2, ll.1-16; col.3, ll.11-54; col.4, ll.20-58; col.6, ll.50-67 and col.7, ll.1-3 ).

### ***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Naum B Levin whose telephone number is 703-305-0144. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew S Smith can be reached on 703-308-1323. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.



LEIGH M. CARDONEM  
PATENT EXAMINER

N L  
July 9, 2003